

## Abstract

A system and method for creating a graphical program which accesses registers of a hardware device. In one embodiment, a register access node or primitive may be included in a graphical program, such that when the graphical program is executed on the computer system, the register access node is operable to access (i.e., either read or write) registers of a hardware device in the computer system. The method may comprise first displaying a register access node in the graphical program in response to user input. For example, the user may select the register access node from a palette and drag and drop the register access node onto a window of the graphical program being created. The user may then configure the register access node to access one or more registers of a selected hardware device, e.g., by using a user interface for performing this configuration. In one embodiment, the computer may store a description of the hardware device, wherein the register access node uses the description of the hardware device to access registers of the hardware device during execution of the graphical program. In one embodiment, configuring the register access node may include displaying a list of registers or a list of fields of registers described in the description of the hardware device and receiving user input to select one or more of the registers from the list of registers. The list may also or instead comprise a list of mnemonic names of registers and/or a list of mnemonic names of fields in the registers. The user may thus configure the register access node to access selected registers described in the description of the hardware device.